AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-130. (Cancelled)

131. (Currently Amended) A process for assisting the function of a heart having an outer wall using a deformable direct mechanical ventricular assistance apparatus, said heart disposed within a patient, said process comprising:

importing at least one value of at least one parameter relating to said function of said heart into a controller;

importing at least a drive fluid flow rate of said direct mechanical ventricular assistance apparatus into said controller;

using an algorithm to formulate at least one command instruction, based upon said at least one value of said one parameter; and

exporting said at least one command instruction from said controller to assist said heart by effecting changes in volume of a drive fluid within a single continuous cavity of variable volume of said deformable direct mechanical ventricular assistance apparatus, said cavity extending circumferentially completely and continuously around said outer wall of said heart.

132. (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is input by said patient.

133. (Original) The process as recited in claim 131, wherein said at least one parameter is input by a physician.

134.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is a therapeutic response factor.

135.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is an electrophysiological parameter.

136.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is a three-dimensional data array of electrophysiological parameters.

137.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is a biochemical marker.

138.   (Withdrawn) The process as recited in claim 137, wherein said biochemical marker is selected from the group consisting of lactate, C-reactive protein, oxygen, and carbon dioxide.

139.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is blood pressure.

140.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is blood flow velocity.

141.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is cardiac ejection fraction.

142.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is inferred from ultrasonic image data.

143.   (Withdrawn) The process as recited in claim 142, wherein said at least one parameter inferred from ultrasonic image data is right ventricle volume.

144.   (Withdrawn) The process as recited in claim 142, wherein said at least one parameter inferred from ultrasonic image data is left ventricle volume.

145.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is inferred from magnetic resonance image data.

146.   (Withdrawn) The process as recited in claim 145, wherein said at least one parameter inferred from magnetic resonance image data is right ventricle volume.

147.   (Withdrawn) The process as recited in claim 145, wherein said at least one parameter inferred from magnetic resonance image data is left ventricle volume.

148.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is a numerical values that quantifies a prior aspect of said patient.

149.   (Withdrawn) The process as recited in claim 131, wherein said at least one parameter is predictive parameter of said patient.

150.   (Original) The process as recited in claim 131, further comprising the step of importing at least one value of a second parameter.

151.   (Cancelled)

152.   (Cancelled)

153.   (Previously Presented) The process as recited in claim 131, further comprising importing the fluid pressure of said direct mechanical ventricular assistance apparatus into said controller.

154.   (Cancelled)

155.   (Previously Presented) The process as recited in claim 131, wherein said at least one command instruction of said algorithm maintains said function of said heart constant.

156.   (Withdrawn) The process as recited in claim 131, wherein said at least one command instruction of said algorithm instructs said direct mechanical ventricular assistance apparatus to provide training to said heart.

157.   (Withdrawn) The process as recited in claim 131, wherein said at least one command instruction of said algorithm instructs said direct mechanical ventricular assistance apparatus to assist in regeneration of said heart.

158.   (Cancelled)

159.   (Withdrawn) The process as recited in claim 131, wherein said exporting of said at least one command instruction instructs the delivery of a first therapeutic agent.

160.   (Withdrawn) The process as recited in claim 159, wherein said first therapeutic agent is selected from the group consisting of anti-inflammatory agents, gene therapy agents, gene transfer agents, stem cells, chemo-attractants, cell regeneration agents, ventricular remodeling agents, anti-infection agents, tumor suppressants, tissue and/or cell engineering agents, imaging contrast agents, tissue staining agents, nutrients, and mixtures thereof.

161.   (Withdrawn) The process as recited in claim 131, wherein said exporting of said at least one command instruction instructs the delivery of a first regenerative agent.

162.   (Withdrawn) The process as recited in claim 161, wherein said first regenerative agent is selected from the group consisting of tissue scaffold materials, biochemical materials, stem cells, and electrical stimulation.

163-242. (Cancelled)

243.   (Currently Amended) A process for assisting the function of a heart including a left ventricle, a right ventricle and an outer wall using a deformable direct mechanical ventricular assistance apparatus, the heart disposed within a patient, the process comprising:

importing at least one value of at least one parameter relating to the function of the heart into a controller;

using an algorithm to formulate at least one command instruction, based upon the at least one value of the one parameter; and

exporting the at least one command instruction from the controller to assist the heart by effecting changes in volume of a drive fluid within a first cavity of variable volume corresponding to the left ventricle and a separate second cavity of variable volume corresponding to the right ventricle of said deformable direct mechanical ventricular assistance apparatus, the first and second cavities together extending circumferentially completely and continuously around the outer wall.

244.   (Currently Amended) The process of claim 243, ~~wherein said heart is assisted by a direct mechanical ventricular assistance apparatus comprising said first cavity and said second cavity, and~~ further comprising importing at least a drive fluid flow rate of said direct mechanical ventricular assistance apparatus into said controller.